

Claims

1. A method of growing a gallium nitride single crystal using a flux comprising at least sodium metal; said method comprising the step of:
growing said gallium nitride single crystal in an atmosphere comprising gas mixture comprising nitrogen gas under a total pressure of 300 atms or higher and 2000 atms or lower.
2. The method of claim 1, wherein said atmosphere has a nitrogen partial pressure of 100 atms or higher and 2000 atms or lower.
3. The method of claims 1 or 2, wherein said crystal is grown at a temperature of 900 °C or higher and 1500 °C or lower.
4. The method of claims 1 or 2, wherein said crystal is grown at a temperature of 950 °C or higher and 1200 °C or lower.
5. The method of any one of claims 1 to 4, further comprising the step of elevating a crucible containing said flux so that a seed crystal contacts said flux.
6. The method of any one of claims 1 to 5, wherein said gallium nitride single crystal is grown using a system for hot isostatic press.
7. Gallium nitride single crystal grown by the method of any one of claims 1 to 6.